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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,062	08/22/2003	Hongsheng Zhong	018360-254508 9710	
826 7590 05/15/2007 ALSTON & BIRD LLP BANK OF AMERICA PLAZA			EXAMINER	
			TO, TUAN C	
	101 SOUTH TRYON STREET, SUITE 4000			PAPER NUMBER
CHARLOTTE, NC 28280-4000		•	3663	
		·		
		•	· MAIL DATE	DELIVERY MODE
	•		05/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

,		Application No.	Applicant(s)			
Office Action Summary		10/647,062	ZHONG ET AL.			
		Examiner	Art Unit			
		Tuan C. To	3663			
Period fo	The MAILING DATE of this communication app r Reply	pears on the cover sheet with	orrespondence address			
WHIC - Extending after the second of the sec	ORTENED STATUTORY PERIOD FOR REPLEMENTED IN THE MAILING DESIGNS of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statuted the period by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be ting  will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 15 F	ebruary 2007 and 13 March 2007	<b>7</b> .			
	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition	on of Claims					
4)🖂	4) Claim(s) 1, 2, and 4-32 is/are pending in the application.					
•	4a) Of the above claim(s) <u>9-30</u> is/are withdrawn from consideration.					
5)	)☐ Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1,2,31 and 32</u> is/are rejected.					
7)🖂	Claim(s) <u>4-8</u> is/are objected to.					
8)□	B) Claim(s) are subject to restriction and/or election requirement.					
Application	on Papers					
9)[] ~	The specification is objected to by the Examine	er.				
10)⊠ The drawing(s) filed on <u>14 October 2003</u> is/are: a)⊠ accepted or b)□ objectéd to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	Action or form PTO-152.			
Priority u	nder 35 U.S.C. § 119					
12) 🗌 🗸	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).			
a)[	All b) Some * c) None of:	•				
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		•	•			
Attachment	(s)					
	e of References Cited (PTO-892)	4) Interview Summary	·			
	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P				
• —	No(s)/Mail Date	6) Other:				

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 4-8, 31, and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 31, each recites the limitation "assignment" in the claim.

There is insufficient antecedent basis for this limitation in the claim.

Claims 1 and 31 recites "grid segment visiting frequency represents a comparison between a number of stops in said grid segment by said driver during said reference period and a total number of stops by said staff of drivers during said reference period". It is unclear how such the comparison can be done during a reference period.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

anticipated by Westerlage et al. (US 5970481A).

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent. Claims 1, 2, 31, and 32 are rejected under 35 U.S.C. 102 (b) as being

Westerlage et al. teaches a system/method of optimizing a route plan having a plurality of routes within a service territory comprising: dividing said service territory into a plurality of unassigned cells (figure 2, each region is divided into a plurality of unassigned cells), wherein a subset of said unassigned cells is associated with a grid segment (figure 2, 1, 2, 3 are subset of said cells); identifying from among a staff of drivers a most frequent driver for the grid segment based upon a grid segment visiting frequency calculated for said grid segment and each of said drivers during a reference period (figure 1, dispatch 30 monitors the position of vehicle 20 in specified region via the information received from the mobile unit 22 of the vehicle 20), and classifying said subset of said unassigned cells associated with said grid segment as a core cell and assigning each said core cell to said identified most frequent driver (column 10, lines 37-49), if said grid segment visiting frequency calculated for said cell and said most

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frequent driver is greater than said minimum grid segment visiting frequency limit,

## Allowable Subject Matter

Claims 4-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### **Conclusions**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Patent Examiner,

Tuan C To

May 12, 2007